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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,672	09/17/2003	Masanori Hashiba	OGW-0285	2466
23353	7590	12/01/2004	EXAMINER	
RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			DIXON, MERRICK L	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S.O.

<b>Office Action Summary</b>	<b>Application No.</b> 10/663,672	<b>Applicant(s)</b> HASHIBA ET AL.	
	<b>Examiner</b> Merrick Dixon	<b>Art Unit</b> 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date see office action.

- 4) ☐ Interview Summary (PTO-413) **MERRICK DIXON**  
Paper No(s)/Mail Date. \_\_\_\_\_ **PRIMARY EXAMINER**
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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The instant office action contains two(2) initialed and signed PTO-1449:

PTO-1449 has date of 9-17-2003

PTO-1449 has date of 12-16-2003.

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Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 2, the phrase, "apparent density" is not understood. Applicants are requested to provide better claim language for examination. Also, what material is this referring to? The examiner hereinafter assigns this density to the fiberboard.

In claim 2, the phrase, "the carboxyl-terminal" lacks proper antecedent basis.

In line 2, of claim 2, the weight lacks recognizable units.

In claim 5, it is not understood what bending strength is being referred to.

In claim 6, the claim is not understood. The "retention rate of a bending strength" is not understood. No rate is claimed. What bending strength is being referred to here?

Applicants are requested to provide better claim language for examination.

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Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, line 3, it is not understood what the phrase, "through melt spinning" refers to.

In claim 9, it is not understood if the polyactic acid resin are new or portions remaining after the fibrosing step in claim 8. Isn't the resin now totally fibers? Is the fibers further fibrosed?

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1,2, 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al(5830548) alone.

The cited reference teaches the basic claimed invention including a fiberboard material of specific density made from mixture of natural fibers and polylactic acid resin- col 1,

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lines 50-56; col 8, lines 10-21; col 10, lines 23-65; col 11, lines 39-54; col 19, lines 10-32; col 28, lines 48-64. The reference teaches the claimed density in col 90, lines 17-20. It is submitted the cited reference teaches the claimed invention, as set forth above and can be understood. Concerning claim 5 and 6, the reference teaches fiberboard inherent strengths, including bending strength, resulting from fiber inclusions/properties in col 14, lines 33-35; col 42, lines 28-43. Obtaining optimum values for such result effective variable involves routine skill in the art. In re Boesch, 617 F.2d 272,205, USPQ 215 (CCPA 1980). Concerning claims 4 and 7, it is submitted that the resin would possess such claimed article limitations as such would be inherent. Likewise and concerning claim 2, it would involve only routine skill in the art to obtain the claimed equivalent weight for the carboxyl-terminal. In re Boesch, 617 F.2d 272,205 USPQ 215 (CCPA).

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al(US 5,830,548) in view of Papsin Jr(US 6,281,298).

The primary reference teaches the claimed invention as set forth above, inter alla. The reference fails to teach polycarbodiimide additive in its fiberboard article. The secondary reference, however, teaches that it is known in the art to add such well known adhesive enhancer such as polycarbodiimide compound in mixtures for making fiberboards as taught by the primary reference- col 9, lines 49-61; col 13, lines 20-26. it would have been obvious to one of ordinary skill in the art at the time the invention is made to

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combine the teachings of the secondary reference and include such well known adhesive enhancer such as polycarbodiimide compound in the primary reference's mixture, in the absence of unexpected results. Such a combination would have been obvious to better bond/form the fiberboard- see Papsin jr, col 9, lines 52-57.

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Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reck et al(US 6,596,386 B1) is cited of interest for its teachings as set forth and additionally to show the state of the art.

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Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 ( November 15, 1989). **NOTE: All facsimiles sent to the examiner's personal fax number should be in draft-forms and will be treated as informal.**

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**Same facsimiles will not be entered** in the related applications unless


otherwise agreed and noted by the examiner.

**The fax number for all other fascimile is 703-872-9306.**

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays to Thursdays, between 12 noon and 8 PM, eastern time . The examiner's supervisor, Mrs. Rena Dye, can be reached at 571-272-3186.



Merrick Dixon

Primary Examiner

Group 1700